



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,363	07/15/2008	John Wentworth Bucknell	FISHER-J	3191
79341	7590	01/12/2012	EXAMINER	
KRUGLIAK, WILKINS, GRIFFITHS & DOUGHERTY CO, LPA			PICKARD, ALISON K	
4775 MUNSON STREET N.W.			ART UNIT	PAPER NUMBER
P.O. BOX 36963				3674
CANTON, OH 44735-6963			MAIL DATE	DELIVERY MODE
			01/12/2012	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,363	<b>Applicant(s)</b> BUCKNELL, JOHN WENTWORTH
	<b>Examiner</b> ALISON PICKARD	<b>Art Unit</b> 3674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 November 2011.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 5) Claim(s) 1-7 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6) Claim(s) \_\_\_\_\_ is/are allowed.
- 7) Claim(s) 1-7 is/are rejected.
- 8) Claim(s) \_\_\_\_\_ is/are objected to.
- 9) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 10) The specification is objected to by the Examiner.
- 11) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08) \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bucknell (6,494,465).

Bucknell discloses a device having an annular seal with opposed sealing faces urged into engagement with a body and thrust member 21/22, all of which have converging sealing faces in that they are angled in a direction to meet. The seal faces of lips 28 and 29, for example, are convergent and urged into sealing engagement with pressure.

3. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (2,360,731).

Smith discloses a device having an annular seal 3 with opposed sealing faces urged into engagement with a body and thrust member 5/1. The seal 3 has convergent sealing faces and a rounded heel which rolls under pressure (see Figures 3-6).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bucknell in view of Janian (6,419,236).

Janian teaches a similar sealing device with a seal having lips engaged between two elements. Janian teaches using a spring clip 36/37 to further urge the lips into engagement, thus improving the sealing ability. The spring is considered retained in the member (e.g. the thrust member) that holds the seal. It bears against a non-sealing face. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the spring clip of Janian to further urge the lips into sealing contact with the members and improve the seal.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bucknell in view of Greer (5,349,894) in view of Sciullo (5,632,297)

It is unclear if Bucknell includes a pressure relief valve. However, Greer teaches the use of a pressure relief valve 60 in a hydraulic device to allow fluid to bleed and prevent over-pressurizing. Greer teaches any type of relief valve can be used. Sciullo teaches a known pressure relief valve that includes a porous (e.g. sintered metal) element in the valve that allows the fluid and gas to bleed but prevents contaminants and particles from passing. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made use a pressure relief valve to prevent over-pressurizing and to include a porous element that would keep particles and contaminants from passing through.

*Response to Arguments*

7. Applicant's arguments filed 11-16-11 have been fully considered but they are not persuasive. The prior art rejections have been maintained. And, the 112 1<sup>st</sup> rejection has been

withdrawn for now. The language is being interpreted broadly and in view of Figures 2c and 2d, which Applicant noted.

Applicant argues that Bucknell does not disclose the convergent sealing faces. The examiner disagrees. As seen in Figure 4, for example, Bucknell discloses lips 28 and 29 with surfaces in contact with wall of 21 and wall of 22. The lips are angled and following the angle along a plane would result in converging planes. The body and thrust member also have convergent sealing faces near line 23 and wall of 21.

Applicant argues that Smith does not disclose the convergent sealing faces. The examiner disagrees. As seen in Figure 2, for example, Smith discloses converging surfaces 14, for example, which are urged into engagement between the body and thrust 11 member. Given the shape of seal 1, surfaces 4 and 16 can be considered converging as well in that the curves would eventually meet at a point. The body and thrust member also have convergent sealing faces near line 15 and wall of 11, for example.

For both references, it appears Applicant might be arguing features that are not actually required by the claims. The claims do not require any specific surface of the seal to contact any specific surface of the body or thrust member, for example. A seal is created in both.

Applicant argues Janian does not disclose the spring clip as required by claim 2. The examiner disagrees. The spring is retained in the body via the seal and acts on non-sealing surfaces of the seal (at inside of the lips). There are no other limitations distinguishing the claims from what is taught in Janian. Regarding claim 4, this is considered an inherent feature of a spring. If it is biasing the lips into engagement, it is considered loaded/compressed.

Regarding claims 6 and 7, none of the references show that the valve would interfere with the seal as the seal moves within the body. Therefore, the rejection has been maintained.

***Conclusion***

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISON PICKARD whose telephone number is (571)272-7062. The examiner can normally be reached on M-F (9-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Beach can be reached on 571-272-6988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alison K. Pickard/  
Primary Examiner, Art Unit 3674

AP